

# Cuba: Binding farmout agreement signed for Block 9

## Highlights:

- Block 9 binding farmout agreement signed
- Key terms
  - Alameda (140 million bbl target<sup>1,2</sup>) and Zapato (95 million bbl target<sup>1,2</sup>) prospects to be drilled by November 2019; a third well by July 2020
  - Melbana fully carried for 100% of all activities and costs for remainder of term of Block 9 PSC (20+ yrs)
  - Farmout partner to provide any required guarantees
  - Melbana to retain 12.5% of profit oil
  - Melbana back-costs recouped in event of development

## MELBOURNE, AUSTRALIA (2 January 2019)

Melbana Energy Limited (ASX: MAY) ("**Melbana**") is pleased to advise that late on 31 December 2018 it signed a binding definitive farmout agreement with Anhui Modestinner Energy Co., Ltd. ("**AMEC**"), a wholly owned and guaranteed subsidiary of Anhui Guangda Mining Investment Co. Ltd. ("**AGMI**"), with respect to its Block 9 Production Sharing Contract ("**Block 9 PSC**") in Cuba. The binding agreement follows on from the Letter of Intent signed by Melbana and AGMI (see ASX Release 8 October 2018).

Under the terms of the farmout agreement, AGMI has corporately guaranteed the performance of AMEC which will fully fund 100% of all costs associated with the Block 9 PSC from 1 January 2019, including the drilling of at least three wells. The first two of these wells will be drilled prior to 1 November 2019 on Melbana's preferred exploration targets Alameda and Zapato. In the event of a discovery, the third well may be either an appraisal well on Alameda or Zapato or, if no discovery, an exploration well on the Piedra prospect. In all cases, the third well will be drilled prior to July 2020. AMEC is also responsible for providing any required guarantees and will provide Melbana with 12.5%

of any Profit Oil<sup>3</sup>. In the event of a development, Melbana will recoup its Block 9 back costs (approx. US\$3.5M) over time from the Cost Oil<sup>3</sup> in proportion to its relative spend versus AMEC. The farmout agreement has a number of conditions precedent, including Cuban and Chinese regulatory approvals, milestone related terms with respect to any required guarantees and finalization of a Joint Operating Agreement acceptable to both parties. Provisions in the agreement allow for an orderly transition of operatorship to AMEC once all contract conditions precedent have been met.

AMEC have indicated a preference to bring their own rig into Cuba in early 2019 to undertake the drilling program to ensure the committed drilling occurs within the agreed timeline.

**Melbana Energy's CEO, Robert Zammit, said:**

*"We are very pleased to end 2018 by finalising the binding farmout agreement and look forward with great anticipation to drilling our high impact oil prospects in 2019. Alameda and Zapato are significant multi-million barrel targets that will be drilled this year at zero cost to Melbana. Coupled with our recently announced Santa Cruz IOR project and our world class Beehive prospect in Australia, we see huge potential in our portfolio and look forward to an exciting year ahead."*

<sup>1</sup> Independent Expert McDaniel & Associates Competent Persons Report 30 June 2018

<sup>2</sup> **Prospective Resources Cautionary Statement:** The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

<sup>3</sup> About Profit Oil and Cost Oil in a Production Sharing Contract: In a PSC, costs incurred are accumulated and, in the event of a discovery, revenue is allocated against the cost pool until a surplus of revenue arises. The amount of oil allocated against the cost pool is referred to as Cost Oil. The surplus is referred to as Profit Oil and is shared in fixed proportions, depending upon the quality and quantity of oil produced, between the national oil company (CubaPetroleo) and the Contractor (Melbana). The detailed splits when sharing Profit Oil are commercial in confidence and not typically disclosed publicly.

**About Anhui Guangda Mining Investment Co. Ltd:** Anhui Guangda Mining Investment Co. Ltd. reports its assets as in excess of US\$1 billion, oil production of 6,000 barrels/day and over 1000 employees. It operates through its subsidiaries over 13 exploration and exploitation blocks in Kyrgyzstan and other areas of the Americas. It owns 20 onshore drilling rigs of varying capacity allowing for the drilling of wells in excess of 7000 metres. It is expanding its exploration and production business to other countries and regions including Africa and the Middle East. It has developed strategic business relationships with major state-owned Chinese companies such as CNPC, Sinopec, and CNOOC.

## Overview of Block 9 PSC, Onshore Cuba

Block 9 PSC (Block 9) covers 2,380km<sup>2</sup> onshore of the north coast of Cuba. It is in a proven hydrocarbon system with multiple producing fields within close proximity, including the Majaguillar and San Anton fields immediately adjacent to it and the multi-billion barrel Varadero oil field further west (see Figure 1). Block 9 contains the Motembo field, the first oil field discovered in Cuba. Melbana is prequalified as an onshore and shallow water operator in Cuba and was awarded Block 9 on 3 September 2015. Melbana's established position in Cuba provides it with a strong early mover advantage.

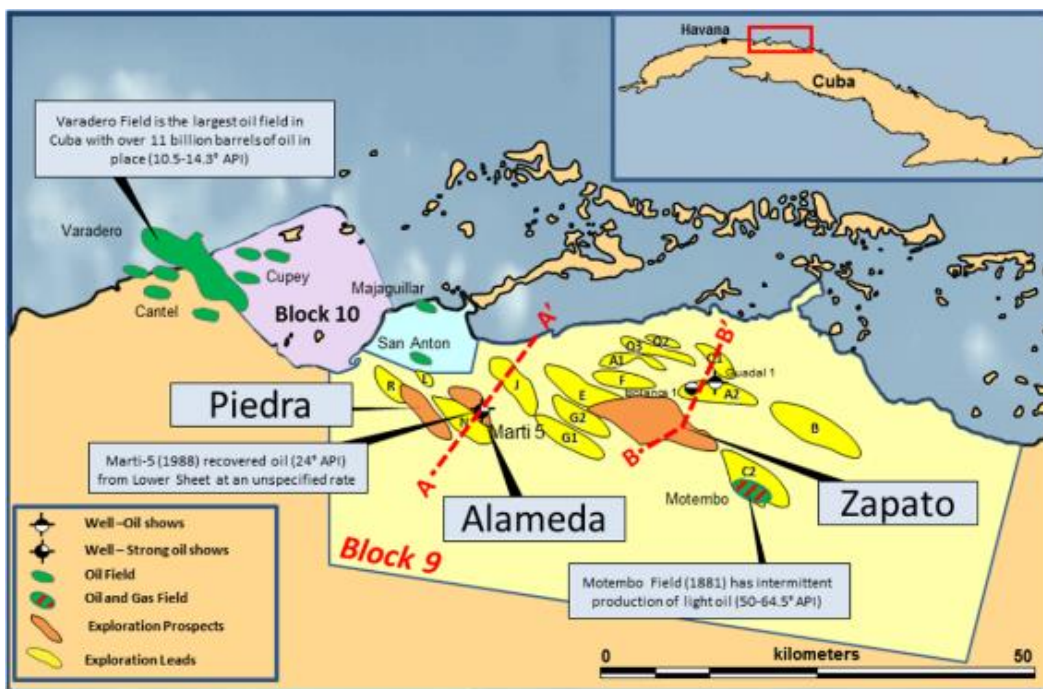


Figure 1 - Block 9 PSC map showing location of key drilling targets

## Background

### Alameda Prospect - highest ranked prospect in Block 9 PSC

The Alameda Prospect is currently the highest ranked exploration target in Block 9 PSC. Alameda is a large structure located in the western part of Block 9 and is in a similar structural position to the Varadero field, the largest oil field in Cuba, approximately 35km away.

The proposed Alameda-1 well which will test a combined exploration potential of over 2.5 billion barrels Oil-in-Place and 140 million barrels of recoverable oil on a 100% unrisks, best estimate basis and 279 million recoverable barrels aggregate high side potential (see Table 1).

The primary objective at Alameda ranges in depth from approximately 3,000 to 3,700 metres. The presence of oil in the Alameda structure is supported by the Marti-5 well drilled within the prospect closure in a down flank position nearly 30 years ago and which recovered 24° API oil and had numerous oil shows extending over a 850 metre gross interval from the lower sheet section (see Figure 2).

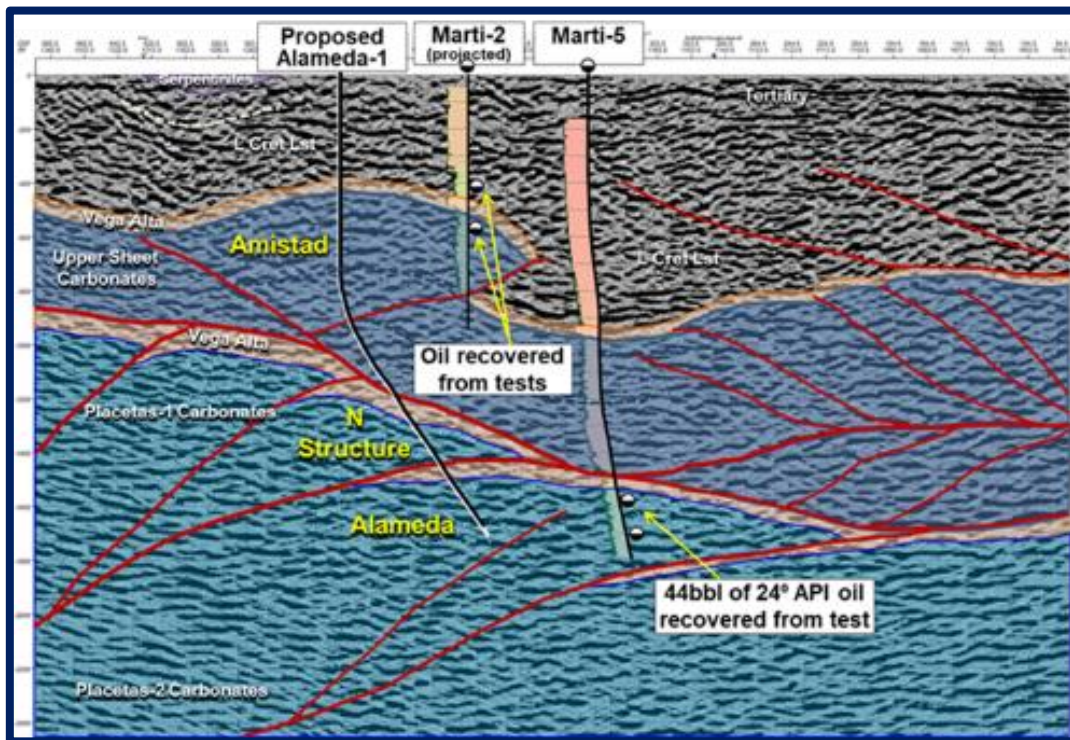


Figure 2 - Alameda-1 trajectory tests three objectives

This exploration well has been designed as a mildly deviated well, with a total measured depth of 4,000m to enable the well to penetrate three independent exploration objectives; the primary Alameda objective as well as the shallower N and Amistad (formerly U1) objectives.

While characterised as an exploration well, the chance of success at Alameda-1 benefits from two old wells, Marti-2 and Marti-5, both of which recovered oil from Amistad/ U1 and Alameda objectives respectively. The Amistad/U1 objective is a structure indicated on seismic as being updip of the tested oil recoveries in the Marti-2 well. Alameda-1 is estimated to take approximately 80 days to drill. In the event of a discovery at Alameda there would be significant follow up potential, with a number of additional leads in close proximity.

Table 1 - Exploration Prospective Recoverable Resource estimates for objectives of Alameda-1 well

Objective	Chance of Success	Recoverable Prospective Resource (MMstb) <sup>1,2</sup>			
		Low	Best	High	Mean
Amistad/U1	15%	24	60	132	71
N	23%	4	9	19	10
Alameda	32%	39	72	128	79
<b>Totals</b>		<b>67</b>	<b>141</b>	<b>279</b>	

## Zapato Prospect

The proposed Zapato-1 well location is in the central portion of Block 9 and is designed to test a lower sheet closure in close proximity to the shallower Motembo oil field, which has historically produced a high quality light oil. The Zapato feature has a crest at approximately 2,000 metres and is a robust structure with nearly 1,000 metres of vertical relief (see **Figure 3**).

Recently completed gravity and magnetic studies commissioned by Melbana and undertaken by Cuba's specialist technical laboratory CEINPET over the Zapato prospect have indicated a strong gravity and magnetic alignment with the structural interpretation Melbana's technical team derived from seismic and surface data. This result is supportive of Melbana's assessment of the prospectivity of Zapato as a large carbonate duplex structure along strike from the Motembo discovery which produced light 56° API oil.

Block 9 has high quality detailed pre-existing gravity and magnetic data sets. In the type of geology present in Cuba it is common to use a combination of seismic, magnetic and gravity data sets to define prospectivity.

Carbonate duplex structures such as Zapato are being targeted by Melbana due to their potential to contain Varadero style oil accumulations and are able to be identified using this technique by their combined gravity and magnetic response which differentiates them from low prospectivity intervals.

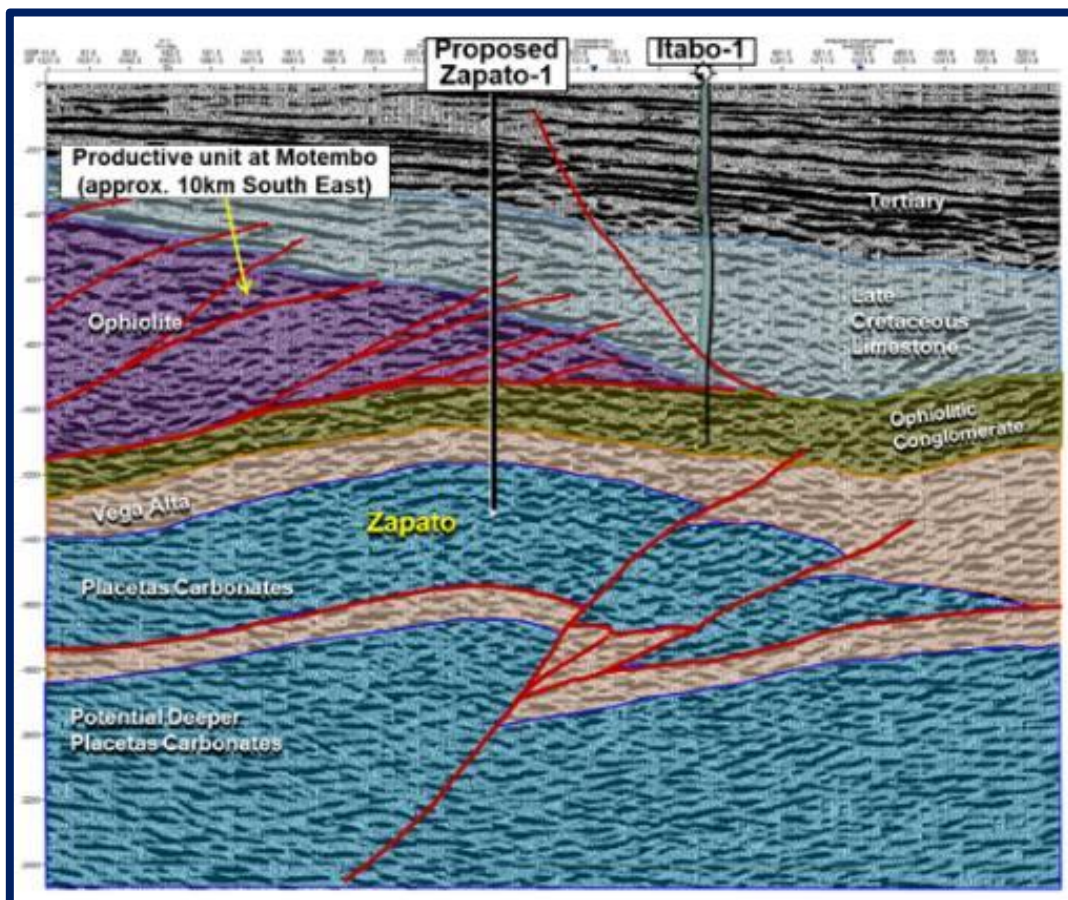


Figure 3 - Zapato Prospect Seismic Profile and Well Path

Table 2 - Exploration Prospective Recoverable Resource estimates for objectives of Zapato well

Objective	Chance of Success	Recoverable Prospective Resource (MMstb) <sup>1,2</sup>			
		Low	Best	High	Mean
Zapato	23%	38	95	214	114

### Piedra Prospect

The Piedra prospect is a large robust structure targeting fractured carbonate objective, adjacent to the San Anton oil discovery. It is a seismically mapped structure that coincides with a large closed gravity high, which were successfully drilled in past (e.g. Varadero). The San Anton oil field recovered 19.5° API oil from shallow section and at Piedra a lighter more mature oil can be expected at its depth. The crest of Piedra is at approximately 1,700 metres with nearly 1,400 metres vertical relief (see **Figure 4**).

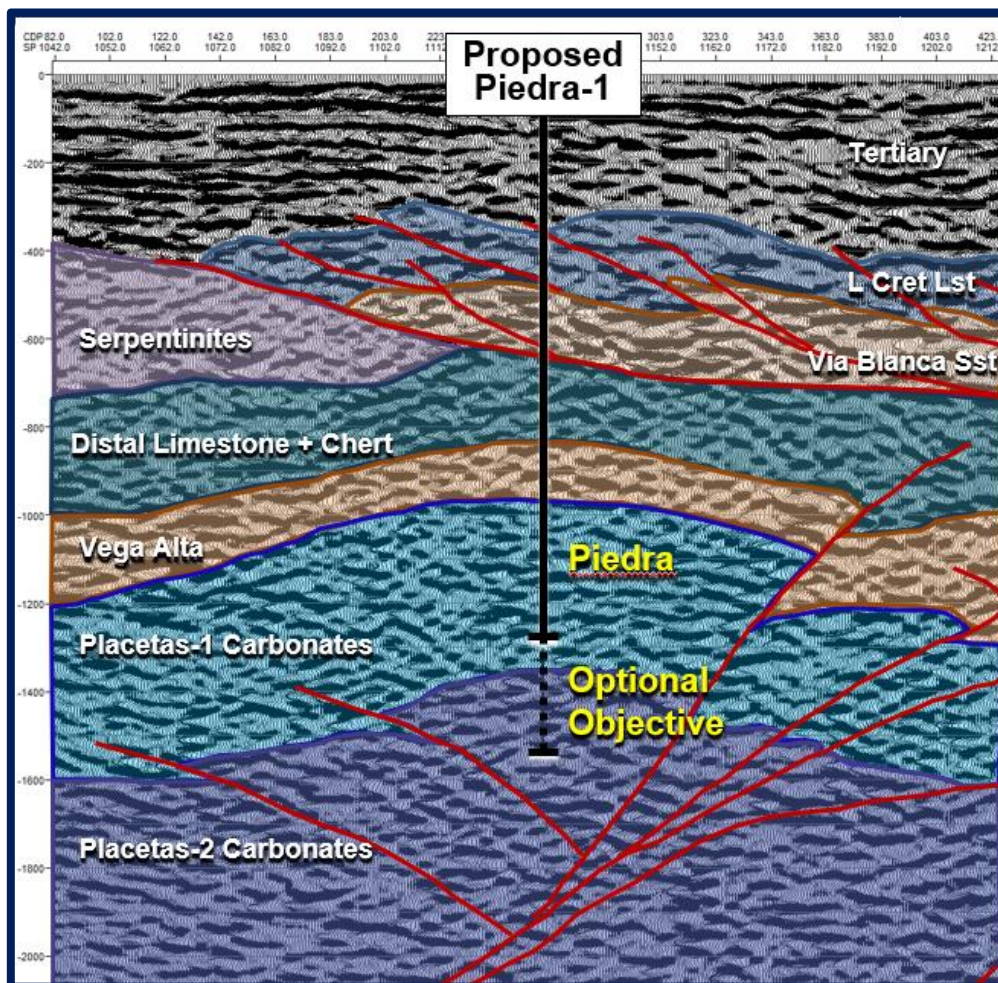


Figure 4 - Piedra Prospect Seismic Profile and Well Path

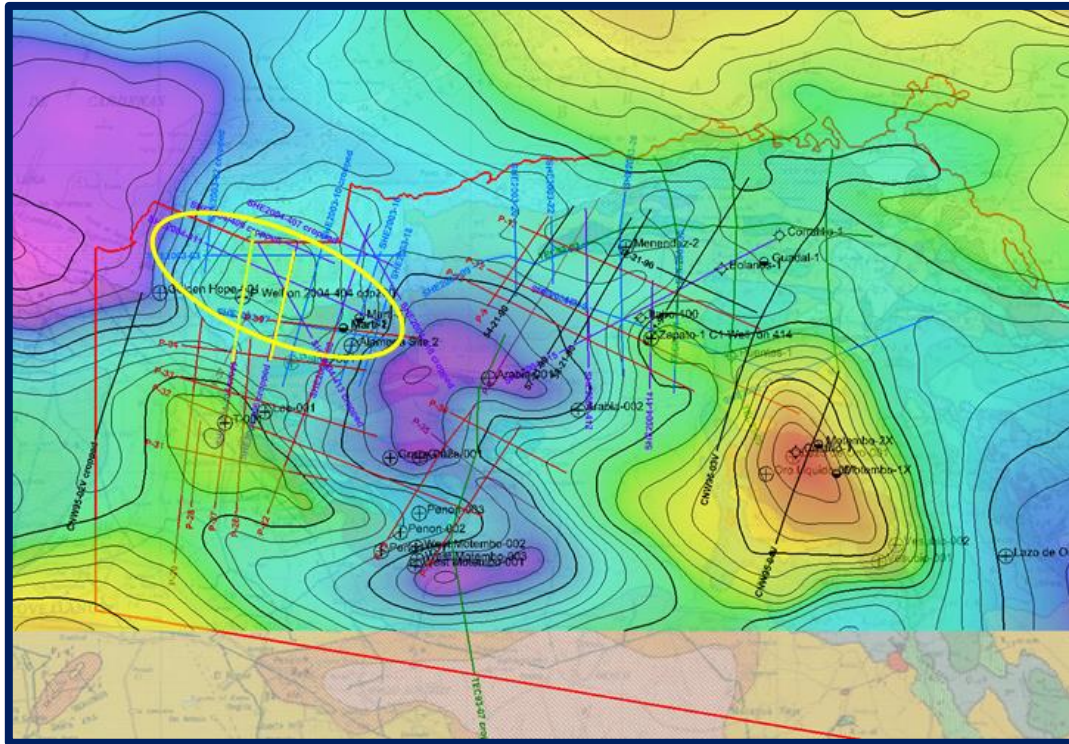


Figure 5 - Gravity high over Piedra Prospect

Table 3 - Exploration Prospective Recoverable Resource estimates for objectives of Piedra well

Objective	Chance of Success	Recoverable Prospective Resource (MMstb) <sup>1,2</sup>			
		Low	Best	High	Mean
Piedra	23%	14	34	76	40

<sup>1</sup> Independent Expert McDaniel & Associates Competent Persons Report 30 June 2018

<sup>2</sup> **Prospective Resources Cautionary Statement:** The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.